



RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/087,464

DATE: 03/14/2002  
TIME: 12:12:40

Input Set : A:\s1237-7019SEQUS.txt  
Output Set: N:\CRF3\03142002\J087464.raw

62 <213> ORGANISM: Homo sapiens  
64 <400> SEQUENCE: 4  
66 Asp Arg Ile Leu Leu Leu Phe Lys Pro Pro Lys Tyr His Pro Asp Val  
67 1 5 10 15  
69 Pro Tyr Val Lys  
70 20  
72 <210> SEQ ID NO: 5  
73 <211> LENGTH: 3475  
74 <212> TYPE: DNA  
75 <213> ORGANISM: Homo sapiens  
77 <400> SEQUENCE: 5  
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80 ggacccttag gctcgtgagc agggaccgcg ggtgcgggtt atgctgggg ctcagatc  
82 cgtagacaac tggacactca ggaccacgccc atggaggagc tgcaggatga ttatgaag  
84 atgatggagg agaatcttgg gcaaggaggaa tatgaagacc cagacatccc cgagtccc  
86 atggaggagc cggcagctca cgacaccgag gcaacagcca cagactacca caccacat  
88 caccgggtt cccacgaggt ctatgtggag ctgcaggagc tggtgatggg cgaaaagaa  
90 caggagctga gatggatgg gggggcgcgc tgggtgcaac tggaggagaa cctgggggg  
92 aatggggcct gggggccccc gcacccctct cacctcacct tctggagcc cctagagc  
94 cgtagagtct tcaccaaggg tactgtccctc cttagaccctc aagagacccctc cctggctg  
96 gtggccaacc aactgctaga caggtttatc tttgaagacc agatccggcc tcaggacc  
98 gaggagctgc tccggggcct gctgtttaaa cacagccacg ctggagagct ggaggcccc  
100 ggggggtgtga agcctgcagt cctgacacgc tctgggatc cttcacagcc tctgctc  
102. caacactcct cactggagac acagcttttctc tttgagcagg gagatggggg cacagaat  
104 cactcaccat ctggattctt gaaaaagatt ccccccggatt cagaggccac gttgtgt  
106 gtggggccgcg ccgacttcct ggagcagccg gtgctggct tcgtgaggct gcaggagc  
108 gcggagctgg aggccgttgg gctgcccgtt cctatacgct tccctttgtt gttgtgt  
110 cctgaggccc cccacatcgat ttacaccccgat tttggccggg ctgctgccac cctcatg  
112 gagaggggtt tccgcataga tgcctacatg gtcagagcc gaggggagct gtcacat  
114 ctagagggct tcctggactg cagccctagtg ctgcctccca ccgtatcccc ctccggat  
116 gcaactgctca gtctgggcc tttgcagagg gagctacttc gaaggcgcta tcagtcc  
118 cctgccaagc cagactccag ctcttacaag ggcctagact taaatggggg cccagatc  
120 cctctgcagc agacaggcca gctcttcggg ggcctggcgtc gtatatccg ggcggcc  
122 ccctattacc ttagtgacat cacagatgca ttccgggggg aggtcctggc tggcgtc  
124 ttcatctact ttgcgtcact gtcacccgcctt atcaccttcg gggccctctt gggagaa  
126 acccggaaacc agatgggatg gtcggagctg ctgatctcca ctgcagtgca gggattt  
128 ttgcggctgc tgggggttca gcccctgtt gttggcggct tctcaggacc cctgctg  
130 tttgagggaaag cttcttcctc gttctgcgag accaaccgtc tagagttatc cgtgggg  
132 gtgtggatcg gttctggctt catcctgtct gttgggttgg tgggtggccctt cgagggt  
134 ttctgggtcc gttctatctc ccgtataacc caggagatct ttccttctt catttt  
136 atttcatct atgagacttt ctccaaagctg atcaagatct tccaggacca cccactat  
138 aagacttata actacaacgt gttgtatgggtt cccaaacctc agggccccctt gcccaacc  
140 gcccctcttcc cccctgttcatggccggat accttcttctt ttgcctatgt gtcgcgc  
142 ttcaagaaca gtccttattt ccctggcaag ctgcgtcggg tcatcggggat cttgggg  
144 cccatctcca tcctgtatcat ggtcctgggtt gatttttca ttcaggatc ctacacc  
146 aaactctcggtt gtcctgtatggg ctcaagggtt tccaaactctc cagccgggg ctgggtca  
148 caccactgg gttgcgttc cggatccatc atctggatgtt tttgcctc cggccctg  
150 gctctgtgg tcttcattatcttcatggatgtt gatgttcaga tcaccacgctt gattgtca  
152 aaacctqagc qcaaqatqqt caaqggqctcc qgctttccacc tggacactqct qctqgtat

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154	ggcatgggtg	gggtggccgc	cctcttggg	atgccttggc	tcagtccac	caccgtgcgt	2340
156	tccgtcaccc	atgccaacgc	cctcaactgtc	atggcaaaag	ccagcacccc	aggggctgca	2400
158	gcccagatcc	aggaggtcaa	agagcagcgg	atcaatggac	tcctggtcgc	tgtgcttgc	2460
160	ggcctgtcca	tcctcatgga	gccccatctg	tcccgatcc	ccctggctgt	actgtttggc	2520
162	atcttcctct	acatgggggt	cacgtcgctc	agcggcatcc	agctcttga	ccgcacatcttgc	2580
164	cttctgttca	agccacccaa	gtatcaccca	gatgtgcct	acgtcaagcg	ggtaagacc	2640
166	tggcgcatgc	acttattcac	gggcacatccag	atcatctgcc	tggcagtgct	gtgggtgggt	2700
168	aagtccacgc	cggcctccct	gcccctgc	ttcgtcctca	tcctcactgt	gcccgtgcgg	2760
170	cgcgtcctgc	tgccgctcat	ttcaggaac	gtggagctc	agtgtctgg	tgctgatgat	2820
172	gccaaggcaa	ccttgatga	ggaggaaggt	cggatgaat	acgacgaagt	ggccatgcct	2880
174	gtgtgagggg	cgggcccagg	ccctagaccc	tcccccacca	ttccacatcc	ccacccatcca	2940
176	agaaaaagca	gaagttcatg	ggcacctcat	ggactccagg	atccctctgg	agcagcagct	3000
178	gaggccccag	ggctgtgggt	ggggaaaggaa	ggcgtgtcca	ggagaccc	cacaagggt	3060
180	agcctggctt	ttctggctgg	gatggccga	tggggcccac	attaggggt	ttgttgcaca	3120
182	gtccctcctg	ttgccacact	ttcaactggg	atccctgtct	ggaagactta	gatctgagcc	3180
184	ctccctcttc	ccagcacagg	cagggtaga	agcaaaggca	ggaggtgggt	gagcgggtgg	3240
186	ggtgcttgc	gtgtgacctt	ggcgtgtcc	cttgcacctt	ccagcctata	tttccctcttc	3300
188	tgtaaaatgg	gtatattgt	gataataccc	acattacagg	atggttactg	aggaccaaag	3360
190	atacatgtaa	aatagggctt	tgtaaactcc	acagggactg	ttctatagca	gtcatcattt	3420
192	gtctttgaac	gtacccaagg	tcacatagct	gggatttgaa	ctgagccgt	cagct	3475

195 <210> SEQ ID NO: 6

196 <211> LENGTH: 911

197 <212> TYPE: PRT

198 <213> ORGANISM: Homo sapiens

200 <400> SEQUENCE: 6

202	Met	Glu	Glu	L	Gln	Asp	Asp	Tyr	Glu	Asp	Met	Met	Glu	Glu	Asn	Leu
203	1				5				10						15	
205	Glu	Gln	Glu	Glu	Tyr	Glu	Asp	Pro	Asp	Ile	Pro	Glu	Ser	Gln	Met	Glu
206					20				25						30	
208	Glu	Pro	Ala	Ala	His	Asp	Thr	Glu	Ala	Thr	Ala	Thr	Asp	Tyr	His	Thr
209					35				40						45	
211	Thr	Ser	His	Pro	Gly	Thr	His	Glu	Val	Tyr	Val	Glu	Leu	Gln	Glu	Leu
212					50				55						60	
214	Val	Met	Asp	Glu	Lys	Asn	Gln	Glu	Leu	Arg	Trp	Met	Glu	Ala	Ala	Arg
215		65				70				75					80	
217	Trp	Val	Gln	Leu	Glu	Glu	Asn	Leu	Gly	Glu	Asn	Gly	Ala	Trp	Gly	Arg
218					85				90						95	
220	Pro	His	Leu	Ser	His	Leu	Thr	Phe	Trp	Ser	Leu	Leu	Glu	Leu	Arg	Arg
221					100				105						110	
223	Val	Phe	Thr	Lys	Gly	Thr	Val	Leu	Leu	Asp	Leu	Gln	Glu	Thr	Ser	Leu
224					115				120						125	
226	Ala	Gly	Val	Ala	Asn	Gln	Leu	Leu	Asp	Arg	Phe	Ile	Phe	Glu	Asp	Gln
227		130				135				140						
229	Ile	Arg	Pro	Gln	Asp	Arg	Glu	Glu	Leu	Leu	Arg	Ala	Leu	Leu	Leu	Lys
230		145				150				155						160
232	His	Ser	His	Ala	Gly	Glu	Leu	Glu	Ala	Leu	Gly	Gly	Val	Lys	Pro	Ala
233					165				170						175	
235	Val	Leu	Thr	Arg	Ser	Gly	Asp	Pro	Ser	Gln	Pro	Leu	Leu	Pro	Gln	His
236					180				185						190	

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238 Ser Ser Leu Glu Thr Gln Leu Phe Cys Glu Gln Gly Asp Gly Gly Thr  
239 195 200 205  
241 Glu Gly His Ser Pro Ser Gly Ile Leu Glu Lys Ile Pro Pro Asp Ser  
242 210 215 220  
244 Glu Ala Thr Leu Val Leu Val Gly Arg Ala Asp Phe Leu Glu Gln Pro  
245 225 230 235 240  
247 Val Leu Gly Phe Val Arg Leu Gln Glu Ala Ala Glu Leu Glu Ala Val  
248 245 250 255  
250 Glu Leu Pro Val Pro Ile Arg Phe Leu Phe Val Leu Leu Gly Pro Glu  
251 260 265 270  
253 Ala Pro His Ile Asp Tyr Thr Gln Leu Gly Arg Ala Ala Ala Thr Leu  
254 275 280 285  
256 Met Ser Glu Arg Val Phe Arg Ile Asp Ala Tyr Met Ala Gln Ser Arg  
257 290 295 300  
259 Gly Glu Leu Leu His Ser Leu Glu Gly Phe Leu Asp Cys Ser Leu Val  
260 305 310 315 320  
262 Leu Pro Pro Thr Asp Ala Pro Ser Glu Gln Ala Leu Leu Ser Leu Val  
263 325 330 335  
265 Pro Val Gln Arg Glu Leu Leu Arg Arg Arg Tyr Gln Ser Ser Pro Ala  
266 340 345 350  
268 Lys Pro Asp Ser Ser Phe Tyr Lys Gly Leu Asp Leu Asn Gly Gly Pro  
269 355 360 365  
271 Asp Asp Pro Leu Gln Gln Thr Gly Gln Leu Phe Gly Gly Leu Val Arg  
272 370 375 380  
274 Asp Ile Arg Arg Arg Tyr Pro Tyr Tyr Leu Ser Asp Ile Thr Asp Ala  
275 385 390 395 400  
277 Phe Ser Pro Gln Val Leu Ala Ala Val Ile Phe Ile Tyr Phe Ala Ala  
278 405 410 415  
280 Leu Ser Pro Ala Ile Thr Phe Gly Gly Leu Leu Gly Glu Lys Thr Arg  
281 420 425 430  
283 Asn Gln Met Gly Val Ser Glu Leu Leu Ile Ser Thr Ala Val Gln Gly  
284 435 440 445  
286 Ile Leu Phe Ala Leu Leu Gly Ala Gln Pro Leu Leu Val Val Gly Phe  
287 450 455 460  
289 Ser Gly Pro Leu Leu Val Phe Glu Glu Ala Phe Phe Ser Phe Cys Glu  
290 465 470 475 480  
292 Thr Asn Gly Leu Glu Tyr Ile Val Gly Arg Val Trp Ile Gly Phe Trp  
293 485 490 495  
295 Leu Ile Leu Leu Val Val Leu Val Ala Phe Glu Gly Ser Phe Leu  
296 500 505 510  
298 Val Arg Phe Ile Ser Arg Tyr Thr Gln Glu Ile Phe Ser Phe Leu Ile  
299 515 520 525  
301 Ser Leu Ile Phe Ile Tyr Glu Thr Phe Ser Lys Leu Ile Lys Ile Phe  
302 530 535 540  
304 Gln Asp His Pro Leu Gln Lys Thr Tyr Asn Tyr Asn Val Leu Met Val  
305 545 550 555 560  
307 Pro Lys Pro Gln Gly Pro Leu Pro Asn Thr Ala Leu Leu Ser Leu Val  
308 565 570 575  
310 Leu Met Ala Gly Thr Phe Phe Ala Met Met Leu Arg Lys Phe Lys

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311	580	585	590	
313	Asn Ser Ser Tyr Phe Pro Gly Lys Leu Arg Arg Val Ile Gly Asp Phe			
314	595	600	605	
316	Gly Val Pro Ile Ser Ile Leu Ile Met Val Leu Val Asp Phe Phe Ile			
317	610	615	620	
319	Gln Asp Thr Tyr Thr Gln Lys Leu Ser Val Pro Asp Gly Phe Lys Val			
320	625	630	635	640
322	Ser Asn Ser Ser Ala Arg Gly Trp Val Ile His Pro Leu Gly Leu Arg			
323	645	650	655	
325	Ser Glu Phe Pro Ile Trp Met Met Phe Ala Ser Ala Leu Pro Ala Leu			
326	660	665	670	
328	Leu Val Phe Ile Leu Ile Phe Leu Glu Ser Gln Ile Thr Thr Leu Ile			
329	675	680	685	
331	Val Ser Lys Pro Glu Arg Lys Met Val Lys Gly Ser Gly Phe His Leu			
332	690	695	700	
334	Asp Leu Leu Leu Val Val Gly Met Gly Gly Val Ala Ala Leu Phe Gly			
335	705	710	715	720
337	Met Pro Trp Leu Ser Ala Thr Thr Val Arg Ser Val Thr His Ala Asn			
338	725	730	735	
340	Ala Leu Thr Val Met Gly Lys Ala Ser Thr Pro Gly Ala Ala Gln			
341	740	745	750	
343	Ile Gln Glu Val Lys Glu Gln Arg Ile Ser Gly Leu Leu Val Ala Val			
344	755	760	765	
346	Leu Val Gly Leu Ser Ile Leu Met Glu Pro Ile Leu Ser Arg Ile Pro			
347	770	775	780	
349	Leu Ala Val Leu Phe Gly Ile Phe Leu Tyr Met Gly Val Thr Ser Leu			
350	785	790	795	800
352	Ser Gly Ile Gln Leu Phe Asp Arg Ile Leu Leu Leu Phe Lys Pro Pro			
353	805	810	815	
355	Lys Tyr His Pro Asp Val Pro Tyr Val Lys Arg Val Lys Thr Trp Arg			
356	820	825	830	
358	Met His Leu Phe Thr Gly Ile Gln Ile Ile Cys Leu Ala Val Leu Trp			
359	835	840	845	
361	Val Val Lys Ser Thr Pro Ala Ser Leu Ala Leu Pro Phe Val Leu Ile			
362	850	855	860	
364	Leu Thr Val Pro Leu Arg Arg Val Leu Leu Pro Leu Ile Phe Arg Asn			
365	865	870	875	880
367	Val Glu Leu Gln Cys Leu Asp Ala Asp Ala Lys Ala Thr Phe Asp			
368	885	890	895	
370	Glu Glu Glu Gly Arg Asp Glu Tyr Asp Glu Val Ala Met Pro Val			
371	900	905	910	
373	<210> SEQ ID NO: 7			
374	<211> LENGTH: 3637			
375	<212> TYPE: DNA			
376	<213> ORGANISM: Homo sapiens			
378	<400> SEQUENCE: 7			
379	cagcggctgc aggacttcac caagggaccc tgaggctcggt gaggcaggac ccgcgggtgcg	60		
381	ggttatgctg ggggctcaga tcaccgtaga caactggaca ctcaggacca cgccatggag	120		
383	gagctgcagg atgattatga agacatgtg gaggagaatc tggagcagga ggaatatgaa	180		

VERIFICATION SUMMARY  
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Input Set : A:\s1237-7019SEQU.S.txt  
Output Set: N:\CRF3\03142002\J087464.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date